



COMMITTEE ON

SCIENCE, SPACE, AND TECHNOLOGY

REPUBLICANS Frank Lucas, Ranking Member

Opening Statement of Ranking Member Brian Babin

Subcommittee on Space and Aeronautics Hearing entitled, "What do Scientists Hope to Learn with NASA's Mars Perseverance Rover"

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NASA's planetary science missions exemplify the American spirit of exploration. They continue our long national tradition of discovery and scientific inquiry. Missions like Perseverance expand humanity's reach throughout the solar system, inspire the next generation of explorers, and maintain technological expertise that is so important to our nation's economic and national security.

Our nation once again experienced a collective "7 minutes of terror" as the Perseverance rover descended to the Martian surface two months ago. It will continue our long history of searching for evidence of past life, produce oxygen on the Mars surface, and has already demonstrated the first controlled flight on another planet with Ingenuity.

Perseverance builds on the success of the Curiosity rover which landed on Mars nearly a decade ago, as well as the Spirit and Opportunity rovers landings in 2004, not to mention the 1976 Viking landing, the 1997 Pathfinder landing and Sojourner rover, and the more recent Phoenix and Insight landing. The landers were also enabled by spacecraft like Mariner, Mars Global Surveyor, Mars Odyssey, Mars Reconnaissance Orbiter, and the MAVEN spacecraft

So far, the United States is the only nation to successfully land and operate on the red planet. To be more specific, the Jet Propulsion Laboratory, is the only entity to do so successfully. Other nations have tried, and the Soviet Union even landed, but no other nation has landed and operated for more than a few seconds. But even we have experienced failures. With all of our success it is easy to forget that landing on Mars is hard. We were reminded of this in the 1990s with the loss of the Mars Observer, the Mars Climate Orbiter, and the Mars Polar Lander. Despite these losses, we remained undeterred.

Going forward, other nations continue to explore Mars. Europe and Russia still operate the Trace Gas Orbiter around Mars, India's Mars Orbiter Mission entered Mars orbit in 2014, and the United Arab Emirates' Hope mission and China's orbiter and rover

entered Mars orbit in February. We also expect another European and Russian ExoMars mission and a Japanese Mars Moon Exploration mission in a couple years.

Mars is getting busy, and for lots of reasons. Other nations see the benefit of planetary exploration, and Mars exploration in particular. Aside from the technological benefits of Mars exploration, some nations, particularly China, see it as a way to legitimize the Communist Party's leadership. Debates about prohibitions on cooperation with China are also coming to light as China prepares to land its rover on Mars. Cooperation is always a tricky subject when it comes to space, and Mars is no different. The Obama Administration cancelled the ExoMars partnership with Europe because of cost overruns with the James Webb Space Telescope, which pushed Europe to partner with Russia for the mission. As Mars exploration becomes increasingly international, Congress and the Administration will have to carefully weigh the pros and cons of partnerships, and the impact of those partnerships on technology transfer and theft, national security, human rights, and communist party legitimacy. It is a privilege to partner with the world-leader in exploration, and they might have more to gain from partnering than we do.

I look forward to many more exciting discoveries as we embark on future planetary missions to Mars like the bold Sample Return Mission. NASA's planetary science program balances a vast portfolio of missions, from large, medium, and small sizes, and explores all of our solar system, including the outer planets, asteroids, and hopefully even a return to Venus in the future. I also look forward to understanding how big ticket items like the Mars Sample Return Mission, the Europa Clipper Mission, reconstituting the Nancy Grace Roman Telescope under the astronomy division, and significantly expanding the Earth science division, will impact the agency and other programs.

Thank you to our witnesses for appearing today, I look forward to your fascinating testimony.